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| <b>TRANSMITTAL LETTER TO THE UNITED STATES<br/>DESIGNATED / ELECTED OFFICE (DO/EO/US)<br/>CONCERNING A FILING UNDER 35 U.S.C. 371</b> |  | ATTORNEY'S DOCKET NUMBER<br><b>P66318US0</b>                     |
| INTERNATIONAL APPLICATION NO<br><b>PCT/NL99/00444</b>   | INTERNATIONAL FILING DATE<br><b>12 July 1999</b> | US APPLICATION NO (If known, see 37 CFR 1.5)<br><b>09/720268</b> |
| TITLE OF INVENTION<br><b>TENT CONSTRUCTION AND METHOD FOR MANUFACTURING THIS TENT CONSTRUCTION</b>                                    |  |  |
| APPLICANT(S) FOR DO/EO/US<br><b>Egbert Berend HOLTKAMP</b>  |  |  |

**Applicant herein submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information.**

1.  This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2.  This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3.  This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4.  A proper Demand for Internatl. Preliminary Examination was made by the 19th month from earliest claimed priority date.
5.  A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is transmitted herewith (required only if not transmitted by the International Bureau).
  - b.  has been transmitted by the International Bureau.
  - c.  is not required, as the application was filed in the United States Receiving Office (RO/US)
6.  A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7.  Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a.  are transmitted herewith (required only if not transmitted by the International Bureau).
  - b.  have been transmitted by the International Bureau.
  - c.  have not been made; however, the time limit for making such amendments has NOT expired.
  - d.  have not been made and will not be made.
8.  A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9.  An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10.  A translation of the annexes to the Internatl. Preliminary Examination report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11. to 16. below concern other document(s) or information included:**

11.  An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12.  An assignment document for recording. A separate cover sheet compliance with 37 CFR 3.28 and 3.31 is included.
13.  A **FIRST** preliminary amendment.
14.  A **SECOND** or **SUBSEQUENT** preliminary amendment.
15.  A substitute specification.
16.  A change of power of attorney and/or address letter.
16.  Other items or information:

International Search Report — EPO  
First Page of Publication  
International Preliminary Examination Report — with Annexes

|   |   |  |                         |
|---|---|--|-------------------------|
| US APPLICATION NO.(If known, see 37 CFR 1.5)  | INTERNATIONAL APPLICATION NO<br><b>PCT/NL99/00444</b> | ATTORNEY'S DOCKET NUMBER<br><b>P66318US0</b> |                         |
| 17. <input checked="" type="checkbox"/> The following fees are submitted:   |   | CALCULATIONS      PTO USE ONLY               |                         |
| <b>Basic National Fee (37 CFR 1.492(a)(1)-(5)):</b>   |   |  |                         |
| Internati. prelim. examination fee paid to USPTO (37 CFR 1.492 (a) (1)) . . . \$690.00  |   |  |                         |
| No international preliminary examination fee paid to USPTO (37 CFR 1.492 (a) (2)) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) . . . \$710.00  |   |  |                         |
| Neither international preliminary examination fee (37 CFR 1.492 (a) (3)) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO) . . . . . \$1000.00   |   |  |                         |
| International preliminary examination fee paid to USPTO (37 CFR 1.492 (a) (4)) and all claims satisfied provisions of PCT Article 33(2)-(4) . . . . . \$100.00  |   |  |                         |
| Search Report prepared by the EPO or JPO (37 CFR 1.492 (a) (5)) . . . . . \$860.00  |   |  |                         |
| <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>   |   |  |                         |
| \$ 860.00   |   |  |                         |
| Surcharge of \$130.00 for furnishing the <b>oath or declaration</b> later than<br><input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).  |   |  |                         |
| \$ 130.00   |   |  |                         |
| <b>Claims</b>   | <b>Number Filed</b>                                   | <b>Number Extra</b>                          | <b>Rate</b>             |
| Total Claims  | 40 - 20 =   | -20-   | x \$18.00               |
| Independent Claims  | 3 - 3 =   | -0-  | x \$80.00               |
| Multiple Dependent Claim(s) (if applicable)   |   |  | + \$270.00              |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>  |   |  | \$ 1350.00              |
| Reduction by 1/2 for filing by <b>small entity</b> , if applicable. Verified Small Entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28).  |   |  | \$                      |
| <b>SUBTOTAL =</b>   |   |  | \$ 1350.00              |
| Processing fee of \$130 for furnishing the <b>English translation</b> later than<br><input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f))  |   |  | \$                      |
| <b>TOTAL NATIONAL FEE =</b>   |   |  | \$ 1350.00              |
| Fee of \$40.00 for recording the enclosed <b>assignment</b> (37 CFR 1.21(h)). Assignment must be accompanied by appropriate cover sheet (37 CFR 3.28, 3.31).  |   |  | \$                      |
| <b>TOTAL FEES ENCLOSED =</b>  |   |  | \$ 1350.00              |
|   |   |  | Amt. to be refunded: \$ |
|   |   |  | Amt. charged: \$        |
| <p>a. <input checked="" type="checkbox"/> A check in the amount of \$ 1350.00 to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. <u>06-1358</u> in the amount of \$ to cover the above fees.<br/>A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge my account any additional fees set forth in §1.492 during the pendency of this application, or credit any overpayment to Deposit Account No. <u>06-1358</u>. A duplicate copy of this sheet is enclosed.</p> |   |  |                         |
| <p>SEND ALL CORRESPONDENCE TO:<br/> <b>Jacobson, Price, Holman &amp; Stern, PLLC</b><br/>         400 7th Street, N.W., Suite 600<br/>         Washington, DC 20004<br/>         202-638-6666</p> <p>By <u>John C. Holman</u><br/>         John C. Holman<br/>         Reg. No. 22,769</p>  |   |  |                         |
| <p><b>CUSTOMER NUMBER: 00136</b></p>  |   |  |                         |
| JPH&S 3/95  |   |  |                         |

09/720268

JCO7 RUS/6707/PTO 10 JAN 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Egbert Berend HOLTKAMP

Serial No.: new

Filing Date: January 10, 2001

For: TENT CONSTRUCTION AND METHOD FOR  
MANUFACTURING THIS TENT CONSTRUCTION

PRELIMINARY AMENDMENT TO LESSEN FEES

Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE CLAIMS

Claim 3, line 1, delete "or 2";  
Claim 4, line 1, delete "or 2";  
Claim 6, line 1, delete "any one of the preceding claims",  
    insert --claim 1--;  
Claim 7, line 1, delete "any one of the preceding claims",  
    insert --claim 1--;  
Claim 9, line 1, delete "any one of the preceding claims",  
    insert --claim 1--;  
Claim 11, line 1, delete "any one of the preceding claims",  
    insert --claim 1--;  
Claim 12, line 1, delete "any one of the preceding claims",  
    insert --claim 1--;  
Claim 16, line 1, delete "any one of claims 13-15",  
    insert --claim 13--;  
Claim 17, line 1, delete "any one of claims 13-16",  
    insert --claim 13--;  
Claim 18, line 1, delete "any one of claims 13-17",  
    insert --claim 13--;  
Claim 19, line 1, delete "any one of claims 13-18",  
    insert --claim 13--;  
Claim 20, line 1, delete "any one of the preceding claims",  
    insert --claim 1--;  
Claim 23, line 1, delete "or 22";  
Claim 25, line 1, delete "or 24";

Applicants: Egbert Berend HOLTKAMP

Claim 26, line 1, delete "or 22";  
Claim 27, line 1, delete "any one of claims 21-26",  
    insert --claim 21--;  
Claim 30, line 1, delete "or 29";  
Claim 31, line 1, delete "any one of claims 27-30",  
    insert --claim 27--;  
Claim 33, line 1, delete "any one of claims 27-32",  
    insert --claim 27--;  
Claim 34, line 1, delete "any one of claims 21-33",  
    insert --claim 21--;  
Claim 35, line 1, delete "any one of claims 21-34",  
    insert --claim 21--;  
Claim 36, line 1, delete "any one of claims 21-35",  
    insert --claim 21--;  
Claim 37, line 1, delete "any one of claims 21-35",  
    insert --claim 21--;  
Claim 38, line 2, delete "any one of claims 21-37",  
    insert --claim 21--;  
Claim 39, line 1, delete "any one of claims 21-37",  
    insert --claim 21--.

REMARKS

The foregoing Preliminary Amendment is requested in order to delete the multiple dependent claims and avoid paying the multiple dependent claims fee.

Early action on the merits is respectfully requested.

Respectfully submitted,

JACOBSON, PRICE, HOLMAN & STERN, PLLC

By \_\_\_\_\_

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Atty. Docket: P66318US0  
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1/PCT

09/720260

JC07 Rec'd PCT/PTO 10 JAN 2001

WO 00/03107

PCT/NL99/0044

Title: CONSTRUCTION AND METHOD FOR MANUFACTURING THIS TENT CONSTRUCTION

The invention relates to a method for manufacturing a tent construction and to a tent construction manufactured according to the method. Within the framework of this specification, a "tent" or "tent construction" is meant to include any construction having one or more walls, including the roof, which are manufactured from (tent) cloth. Some of the many possible examples are camping tents, folding trailer tents, front tents, party tents, circus tents, stalls, protective covers, working tents, roofs, awnings, etc.

10. A problem is that due to a new European legislation in respect of anti-fungal and water-repellent agents for tent cloth (PCP, inter alia, is prohibited or will be so before long, while the cloth that is treated with heavy metals must be taken back by the manufacturer or supplier at the end of its service life), tent cloth from cotton or mixed fiber (cotton/polyester) becomes mildewed very quickly. As a consequence, under unfavorable conditions, a (folding trailer) tent cannot remain folded-in for more than 12 hours, which is an unacceptably short time. Also, with a (folding trailer) tent, it is no longer possible to camp for a longer time during rainy weather conditions, because the cloth will then be affected by fungi.

Because of these problems, the lifetime of tents manufactured from cotton cloth or cloth from mixed fibers becomes unacceptably short, especially in view of the relatively high purchase price. For environmental reasons, this is therefore an objectionable matter, since in spite of

the fact that less toxic substances are used because of the new legislation, the substances remain toxic all the same, from an environmental viewpoint. In view of the (unduly) short lifetime, the tents have to be replaced more often than necessary.

The above problem of a short lifetime due to fungoid growth and fouling can be overcome by using cloth manufactured from synthetic material, such as waterproof polyester cloth or a cloth manufactured from other suitable synthetic fibers, or a plasticized cloth. However, a drawback of such type of cloth is that it does not breathe. As a consequence, condensation occurs on the inside of the tent construction. This also holds for a new type of cotton cloth which has recently become available and which is treated in such a manner that it does not become mildewed quickly and is fire-resistant, but which does not breathe sufficiently, if at all.

Another problem that presents itself in particular in roofs of tent constructions and in particular, but certainly not exclusively, in roofs of front tents of caravans, is that these tent roofs are fouled relatively quickly by sticky drops, such as resin, falling from trees, and by bird droppings. Cleaning of such tent roofs is hardly possible. In practice, it often turns out that front tents of caravans have to be replaced after two years already, due to the fouling of mainly the roof that has occurred in that period.

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The object of the invention is to overcome the drawbacks and problems outlined and generally to provide a durable and efficient tent construction and method for the manufacture thereof. Another object of the invention is to  
5 provide a tent construction and a method for the manufacture thereof that offers very good ventilation possibilities and in which condensation is prevented.

In accordance with the invention, a method for manufacturing a tent construction comprising at least one panel manufactured from suitable cloth is characterized by the steps of ~~manufacture~~ that a basic tent construction having at least one basic panel ~~is manufactured~~ from a desired material and ~~that~~ at least one of the basic panels ~~is provided~~ with one or more covering panels which form part of the outer wall of the tent  
10 and which are attached so as to be at least partially detachable.  
15

A tent construction according to the invention is characterized by a basic tent construction comprising at least one basic panel, at least one of the basic panels being covered with one or more covering panels of waterproof material which form part of the outer wall of the tent construction. In accordance with another aspect of the invention, at least one covering panel is attached so as to be at least partially detachable.  
20  
25

It is observed that US Patent 5,765,584 discloses a tent whose door is provided with a portion manufactured from gauze, which is in turn provided with a partially detachable

covering panel. This known covering panel is manufactured from waterproof material, yet is located on the inside of the gauze panel and hence on the inside of the tent. The known covering panel, provided on the inside, can partially be unzipped for enabling opening a ventilation opening from the inner space of the tent. Hence, the known panel does not protect a possibly vulnerable inner panel. Also, in the closed position, the known panel does not prevent condensation on the inside.

Insert

10        Hereinafter, the invention will be further described with reference to the accompanying drawing of some exemplary embodiments.

15        Fig. 1 schematically shows, in perspective, an example of a practical application of the invention with a folding trailer provided with a front tent;

Fig. 2 schematically shows another application of the invention;

Fig. 3 shows a detail of a tent construction according to the invention; and

20        Fig. 4 shows a detail of Fig. 2.

Fig. 1 schematically shows an example of a folding trailer tent 1 provided with a front tent 2.

A (folding trailer) tent can be made from 100% synthetic cloth products having a very long lifetime, but which, however, have the drawbacks of condensation and the lack of "breathing capacity". In accordance with a first aspect of the invention, a "skeleton" for at least a part of

a tent (comparable with a timbered house) can be made from synthetic material. However, one or more large faces (roof and sidewall faces) of the tent are "filled in" with exchangeable cloth panels. Fig. 1 shows a front wall 3 of a 5 (front) tent, constructed according to this principle. The wall 3 comprises strips 4 of firm cloth, which form the skeleton of the wall 3, as well as exchangeable panels 5. By means of zippers or Velcro or other techniques, these panels are attached to the "timbered frame/skeleton" along their 10 circumferential edges. The number and dimensions of the panels can be optional. A small number of large panels, or a larger number of small panels. After many years of use, the exchangeable panels can be replaced as and when required. These panels can be produced in stock, in cotton cloth as 15 well as in synthetic materials. At the moment of purchase and thereafter, the user of the tent can decide for himself which panels have to be supplied in synthetic cloth, and which panels in cotton cloth. The choice can partly be motivated by the intended use. If the tent, folding trailer or front tent 20 is predominantly used for camping "on the hike", or, conversely, for a fixed stand, this may determine the composition of the panels. Also, in this manner, allowances can be made for personal preference. One of the objects of the invention is to offer the possibility of minimizing the 25 number of fixed panels of cloth of a relatively short lifetime. In addition, the tent no longer has to be thrown away when a particular panel of cotton cloth has become

moldy, fouled or leaky. The tent (the "timbered frame", the "framework") with all its complicated angular joints, fastening points, reinforcements, etc. is produced once, for a long time, and the "fill-in" panels can be purchased or replaced as and when required. The effect that the tent is discarded due to fouling or because its color is no longer modern can hereby be avoided. This is an advantage to the environment. It is also possible to fit, per panel opening, two or more, if necessary overlapping panels in a simple manner by zippers, Velcro, etc. If so desired, the panels can partially be of rollable or erectable design, to promote the admission of light and air. Hence, the framework of the tent can comprise edges or strips supported by tent poles and the like, which edges or strips are manufactured from highly durable cloth and whereto or whercon panels are fitted that are relatively easy to attach and replace. According to a modification of the above-described tent construction, it is possible to use a number of exchangeable panels which are not, or not all of them, mounted on a separate skeleton, but which are directly detachably connected to adjoining panels via zippers, Velcro or the like.

Fig. 1 schematically shows an example of such construction, used for the roof 6 of the front tent. In the example shown, the roof comprises a central section 7 and two side sections 8 and 9. One or more of the sections 7-9 may be detachably connected to the adjoining section(s) and/or adjoining walls, allowing these detachable sections, when for

instance fouled, to be detached and cleansed. In practice, the cleaning of a roof panel of a tent construction, such as for instance a front tent of a (folding) caravan, is hardly possible if the roof panel is not detachable. Further, when 5 fouled seriously, such panel can readily be replaced. If, for instance, the central section 7 is separately replaceable, zippers or Velcro fasteners may be provided along the edges 7a, 7b, 7c and 7d. Of course, the roof may also be detachable and replaceable as a whole, whether or not in combination 10 with separately detachable roof sections.

Preferably, the roof of the tent is of double design, with an inner roof and an outer roof. In that case, the outer roof may be connected along one or more edges to the inner roof by operable fasteners such as, for instance, zippers or 15 Velcro fasteners or the like. The inner roof may then again be detachably or undetachably connected to a tent skeleton as described hereinabove, or be directly connected, also detachably or undetachably, to adjoining roof panels and/or wall panels.

20 A major advantage of such construction is that by entirely or partially undoing, on two directly or obliquely opposite or adjoining edges, zippers or Velcro or the like, whereby the outer roof is connected to the inner roof, a perfect ventilation possibility is created. In the example 25 shown in Fig. 1, for instance, the zippers of the roof section 7 have been opened along the edges 7a and 7c, to create an open gap 11 between inner roof section 10 and outer

roof section 7. Through the gap, air can flow that may provide cooling when the weather is hot and that may also provide ventilation in the tent when the inner roof is at least manufactured from air-permeable material. By opening 5 only one zipper, for instance on the wind side, forced air is blown into the tent via the gap 11. Conversely, when the zipper on the lee side is opened, air is drawn from the tent.

However, also if no wind is involved, a ventilating air circulation can be created by opening one or more zippers 10 entirely or partially, in that hot air located between the inner roof and the outer roof can then flow away, whereupon air present in the tent can flow through.

To effect that, if necessary, the gap 11 between inner roof and outer roof actually remains open, the outer roof is 15 preferably provided with a tensioning mechanism for pulling the outer roof taut, at least tauter than the inner roof. For this purpose, the outer roof can for instance be readily provided with two or more juxtaposed openings for tent poles, where normally only one opening is present. By using the 20 suitable opening, the roof can be pulled tauter or, by contrast, less taut.

The above arrangement is shown schematically in Fig. 3. Fig. 3 shows two tent poles 12,13 and an inner roof panel 10 supported thereby. Located above the inner roof 25 panel is an outer roof panel 7, which, in this example, has two openings 14,15 at the location of tent pole 12. The opening 14 is closest to the other tent pole 13.



in this example, for attaching the panel 7 to the tent pole 12, causing the panel 7 to be tautened. If the opening 15 farther from the tent pole 13 is used, the panel 7 is tensioned less taut and the gap 11 between the pieces 7 and 5 10 is reduced or disappears.

Advantageously, the inner roof panel can be cut hollow, which promotes the formation of an effective ventilation gap 11.

To prevent raining in, the outer roof panel may be 10 provided with edge flaps, not shown, capable of covering the gap 11 in depending condition. The edge flaps can for instance be secured on the adjoining wall by zippers, plastic studs, loops, hooks, Velcro, etc., or be folded over upwards.

Also, the inner roof panel may have waterproof edge 15 strips along the circumferential edges.

Alternatively, the tent (for instance a camping tent, folding trailer tent, caravan and motorhome front tent) may be constructed from a fairly "open" (like bandage gauze), air-permeable, synthetic woven fabric, for instance from very 20 strong polyester or aramide, etc., or similar yarns. Such a tent can last a generation. The tent can be covered per panel by thin fabrics of cotton, nylon, synthetic cloth, plastic, polyethylene, etc. The type and choice of material per panel can again be filled in individually and according to need and 25 use. An advantage of this method is also that the various panels can remain attached to the supporting fabric by one edge thereof, while the other edges can be attached by a

zipper or the like, which enables the panels to be unzipped and stretched out as desired. In this manner, an almost steplessly controllable ventilation is realized in the tent, whereby the tent can also be optimally ventilated, much better than is usual in the present-day tent technique, during rain (water is discharged, air can enter the tent underneath the panels, via the air-permeable basic/supporting fabric) and during periods of heat. By the stretched-out panels (also roof panels), as for instance shown at 19, like sun screens, the sun is kept out of the tent, while the ventilation can be distributed over almost the entire surface of the tent. Since this supporting fabric can be of a high quality with an enormous resistance to tearing, the safety (vandalism and crime) and the lifetime of the tent has been increased compared with the present-day tents. All advantages of the first-mentioned construction with exchangeable panels apply here as well.

A particular advantage of a double-walled construction of the panels is that also when the outer panels are closed, for instance in the case of rainy weather, condensation is prevented by the insulating action of the layer of air between inner and outer panels and also by the fibrous structure of the inner panels.

These effects, i.e. the insulating action and the prevention of condensation, also occur if an inner panel and an outer panel are fixedly, hence not (partially) detachably, interconnected along their circumferential edges.

A third manner of embodying the finding is to construct the tent from a supporting fabric as desired (for instance cotton for ventilation, strong synthetic fabrics for lifetime and strength, etc.) or a combination of supporting fabrics (cotton, polyester, etc.). The covering panels, which may also be arranged in the manner of roof tiles or scales, can be connected to the basic fabric by, for instance, zippers, Velcro, stitching on one, two or three sides, or a combination thereof, or other connecting techniques. Such panels or "scales" are shown in Fig. 1 at 16, by way of example, and can preferably be pushed or pulled away from the tent from supporting fabric by means of "expanders" 17, or by stretching out by guy ropes, enabling air to permeate the supporting fabric underneath the panels. Along their lower edges, the scales can optionally be provided or not provided with fasteners for attachment to the supporting fabric or to the underlying scale. Optionally, openings or windows may be locally provided in the supporting fabric, behind the covering panels. If so desired, the covering panels can locally be transparent or have (clumsable) windows. Thus, it is possible to have a supporting tent of breathing material, such as for instance cotton, which, protected by the overlying panels, never becomes wet in the rain and which is not exposed to sunrays. The many advantages already pointed out in the above passages are largely also applicable to this finding.

A combination of all above-described techniques is possible.

A major advantage of a tent construction as described hereinabove is that condensation is even prevented during  
5 rainy weather. This renders the construction described highly suitable for being used for, for instance, protective covers for motorcars, boats, motorbikes, airplanes, helicopters, weapon material, excavators and other machines, garden furniture, etc. Other possible applications are the  
10 following:

parts of caravans or campers that are made of cloth;  
party and circus tents and tents for events;  
beach tents;  
tents for accommodating refugees or for providing housing  
15 otherwise, etc.;

tents for accommodating workers (permanently or not permanently), whether or not for special projects; accommodations for animals in which tent cloth is used; storehouses in which cloth is used.

20 built-on tents for caravans and campers;  
various types of awnings, closable or not closable with  
sidewalls;  
shed extensions, verandahs or sun porches;  
storage sheds (with tent roof and/or tent walls or portions  
25 thereof);  
hothouses;

boat and motorcar covers (the cloth or (artificial) leather portion which protects the boat or motorcar permanently from weather influences or which can be opened and closed);

working tents or roofs (used for various purposes, for instance for road, soil, cabling and bridge works, excavations, shipyards, etc.);

boat houses made of cloth;

motorhomes and motorcar garages or roofs made of cloth;

tent houses or tent portions attached to houses;

truck coverings (tarpaulins);

market and sales stalls;

roofs of any nature, such as roofs for swimming pools or sandboxes;

sun screens.

The tent construction according to the invention can also be used for, for instance, the removal of asbestos, by for instance putting up a closed-off tent which keeps the asbestos particles within the tent and keeps out the rain, while the air can enter all the same, utilizing filtering cloth for the underlying layers of cloth.

Conversely, tents, or parts of tents, protective covers, etc. as mentioned above, made as meant by the invention, can keep out harmful particles such as dust or pollen, while ventilation can nevertheless be effected in a sufficient manner.

With a tent according to the invention, allergic persons can camp also when the air contains much pollen, when

the appropriate filtering cloth is used. For instance, during the night, the entire tent can be closed hermetically (if required, an entirely closed tub ground sheet can be used) and fresh air is let in through the filtering cloth.

- 5 An example of a protective cover for a motorcar which embodies the invention is shown schematically in Fig. 2. The cover 20 has an outer layer 21 of waterproof material and an inner layer 22 of breathing material. If required, spacer means may be provided between the two layers. For instance,
- 10 hourglass-shaped spacer means of soft plastic may be used, securable with a few stitches or by means of glue. An example is shown schematically in Fig. 4. Condensation, which normally often occurs in such covers, can thus be avoided. Preferably, also in a protective cover according to the
- 15 invention, the edge connection between an outer panel and an inner panel can be opened or closed by operating means to enable ventilation. In Fig. 2, the roof panel is open and the open space between inner panel and outer panel is indicated by 23.
- 20 In a tent construction according to the invention, the space between an outer and an inner panel, when the outer panel is entirely closed, contains a layer of substantially still air, which has a heat-insulating effect. This prevents condensation. Condensation is also prevented in that the
- 15 inner panel is not manufactured from dense, smooth material. The insulating effect can even be improved by inserting

between an outer panel and an inner panel, or underneath the "scales" if scales are used, a layer of insulating material.

If so desired, the outer panels and "scales" of a tent construction according to the invention can even be of a 5 double-layered construction, so that between the two layers an insulating material, such as for instance blister padding, aluminum foil, blisterspadding with a layer of aluminum, etc., can be provided. The relevant panels can for instance be designed as a type of envelope, enabling ready insertion and 10 removal of the insulating material.

It is observed that after the foregoing, various modifications will readily occur to anyone skilled in the art. Such modifications are understood to fall within the framework of the invention.

## Abstract

Method for manufacturing a tent construction having at least one panel manufactured from suitable cloth, and tent construction manufactured utilizing the method. A basic panel is manufactured from a material of desired properties and is provided with one or more covering panels or waterproof material that form part of the outer wall of the tent construction. The basic panel may consist of relatively narrow edges of durable material or of an entirely or partially closed panel of open, breathing material.

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Claims

1. A method for manufacturing a tent construction (1) comprising at least one panel manufactured from suitable cloth, **characterized by** the steps of manufacturing a basic tent construction having at least one basic panel from a desired material and providing at least one of said basic panels with 5 one or more covering panels (5) of waterproof material which form part of the outer wall (3) of the tent construction (1).
2. A method according to claim 1, wherein at least one of the covering panels (5) is fitted so as to be at least partially detachable.
3. A method according to claim 1 or 2, further including the steps of 10 forming the basic panel by a number of relatively narrow edge strips (4) of durable cloth, and attaching to said edge strips (4) one or more at least partially detachable covering panels (5), which together with the relatively narrow edge strips (4) form a complete panel or panel part.
4. A method according to claim 1 or 2, wherein the basic tent 15 construction is formed from breathing material on which at least one covering panel (5) of weather-resistant material is fitted.
5. A method according to claim 3, wherein the opening left clear by the relatively narrow edge strips (4) is closed off by a relatively open, breathing material for forming a closed basic panel, and wherein on the thus obtained 20 basic panel at least one covering panel of weather-resistant material is fitted.
6. A method according to any one of the preceding claims, wherein at least one of the basic panels is provided with covering panels (5) arranged in the manner of roof tiles or scales (16).
7. A method according to any one of the preceding claims, wherein one 25 or more covering panels (5) are arranged for setting out or folding down or the like.

8. A method according to claim 3, wherein from the relatively narrow edge strips (4), together with tent poles (12,13) and the like, a frame for the tent construction (1) is formed.

9. A method according to any one of the preceding claims, wherein for 5 attaching at least one covering panel (5) along at least one of the edges of the covering panel, detachable fastening means are used.

10. A method according to claim 9, wherein as the detachable fastening means zippers, Velcro fasteners or the like are used.

11. A method according to any one of the preceding claims, wherein at 10 least one of the covering panels (5) is provided with an expansion member (17) to enable putting the covering panel (5) into an outwardly open position.

12. A method according to any one of the preceding claims, wherein at least one of the covering panels (5) is provided with one or more guy ropes for stretching out the covering panel.

15. 13. A method for manufacturing a tent construction having at least one roof panel and at least one wall panel (4), characterized by the steps of making at least the roof panel of double-walled design having an outer panel (7,8,9) and an inner panel (10), and providing operable closing means to enable opening or closing the interspace (11) located between the inner panel (10) and 20 the outer panel (7,8,9).

14. A method according to claim 13, wherein the outer panel (7,8,9) is provided with means (14,15) for tautening the outer panel (7,8,9) to increase the interspace (11) between the outer panel (7,8,9) and the inner panel (10).

15. A method according to claim 14, wherein at the location of at least 25 one of the tent poles (12,13), the outer panel (7,8,9) is provided with at least one additional opening (14,15) for receiving a tent pole (12,13) to enable bringing the outer panel (7,8,9) into a taut and a less taut condition.

16. A method according to any one of claims 13-15, wherein the inner panel is made with a hollow cut.

17. A method according to any one of claims 13-16, wherein the outer panel (7,8,9) is designed with detachable fastening means provided along at least two edges (7a-7d), for attaching the outer panel (7,8,9) to the inner panel (10).

5 18. A method according to any one of claims 13-17, wherein the outer panel (7,8,9) is provided with edge flaps for covering the interspace between the outer panel (7,8,9) and the inner panel (10).

19. A method according to any one of claims 13-18, wherein the inner panel (10) is provided with one or more waterproof edge strips.

10 20. A method according to any one of the preceding claims for manufacturing a tent construction (1) comprising a roof (6) consisting of at least one panel, wherein the roof (6) as a whole and/or the panels (7,8,9) forming the roof (6) are made to be separately detachable, utilizing suitable operable fastening means.

15 21. A tent construction (1) comprising at least one panel manufactured from suitable cloth, characterized by a basic tent construction (1) comprising at least one basic panel (4), at least one of the basic panels being covered with one or more covering panels (5) of waterproof material, forming part of the outer wall of the tent construction (1).

20 22. A tent construction according to claim 21, characterized in that at least one of the covering panels (5) is attached so as to be at least partially detachable.

23. A tent construction according to claim 21 or 22, characterized in that the at least one basic panel (5) comprises a number of relatively narrow edge

25 (4) strips of durable material, one or more at least partially detachable covering panels (5) being attached to the edge strips (4).

24. A tent construction according to claim 23, characterized in that the opening of the at least one basic panel, which opening is left clear by the relatively narrow edge strips (4), is closed off by an air and/or light-permeable

30 material for forming a closed basic panel.

25. A tent construction according to claim 23 or 24, characterized in that the relatively narrow edge strips (4) of a number of basic panels, together with associated tent poles (12,13) or the like, form at least a part of a frame for the tent construction (1).

5 26. A tent construction according to claim 21 or 22, characterized in that the basic tent construction (11) is at least partially built up from breathing cloth, on which a suitable number of panels from weather-resistant material are provided, said number of panels comprising one or more at least partially detachable panels (5).

10 27. A tent construction according to any one of claims 21-26, characterized in that the at least partially detachable panels (5) comprise at least a roof panel (7,8,9).

15 28. A tent construction according to claim 27, characterized in that by operable fastening means, the roof panel (7,8,9) is connected along at least two edges (7a-7d) to an inner roof panel (10), while by the fastening means, a gap-shaped space (11) can be opened or closed between the outer roof panel (7,8,9) and the inner roof panel (10).

20 29. A tent construction according to claim 28, characterized in that the inner roof panel (10) is provided with waterproof edge strips adjacent the fastening means.

30. A tent construction according to claim 28 or 29, characterized in that the outer roof panel (7,8,9) is provided with an edge flap adjacent the fastening means, for covering the entrance to the gap-shaped space (11).

31. A tent construction according to any one of claims 27-30,  
25 characterized by tensioning means (14,15) for tensioning the at least one roof panel (7,8,9) taut or less taut.

32. A tent construction according to claim 31, characterized in that the tensioning means comprise a number of receiving openings (14,15) for a tent pole (12,13), provided side by side in the roof panel (7,8,9).

33. A tent construction according to any one of claims 27-32, characterized by an inner roof panel (10) which is located under a partially detachable outer roof panel (7,8,9) and which is cut hollow.

34. A tent construction according to any one of claims 21-33, having an 5 outer roof (6) formed from one or more covering panels, characterized in that the outer roof (6) as a whole and/or one or more of the panels (7,8,9) thereof is/are attached by operable fasteners so as to be entirely detachable.

35. A tent construction according to any one of claims 21-34, characterized in that at least a number of covering panels (16) can be 10 stretched out by means of expanders and/or tensioners (17).

36. A tent construction according to any one of claims 21-35, characterized in that at least one of the covering panels (5) is of double-layered design such that between the layers of such a covering panel (5), a layer of insulating material can be provided.

37. A tent construction according to any one of claims 21-35, characterized in that under at least a number of covering panels (5), a layer of 15 insulating material has been provided.

38. A caravan or folding caravan comprising a tent construction (1) according to any one of claims 21-37.

39. A tent construction according to any one of claims 21-37, designed as 20 protective cover (20) comprising a number of panels, characterized in that at least one of the panels comprises a basic panel (22) of breathing material which, in operation, is located on the inside of the cover (20) and which comprises a covering panel (23) of waterproof material located on the outside, 25 said covering panel (23) being attached, at least along a number of its circumferential edges, to the basic panel, such that an insulating layer of air is present between the basic panel (22) and the covering panel (23).

40. A tent construction according to claim 39, characterized by spacers provided between the covering panel (23) and the basic panel (22).

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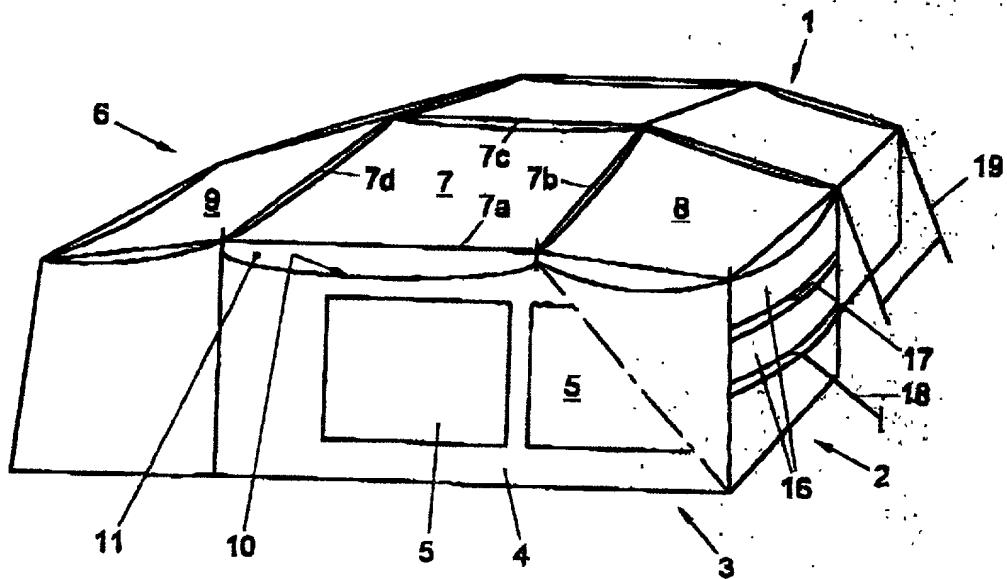


Fig. 1

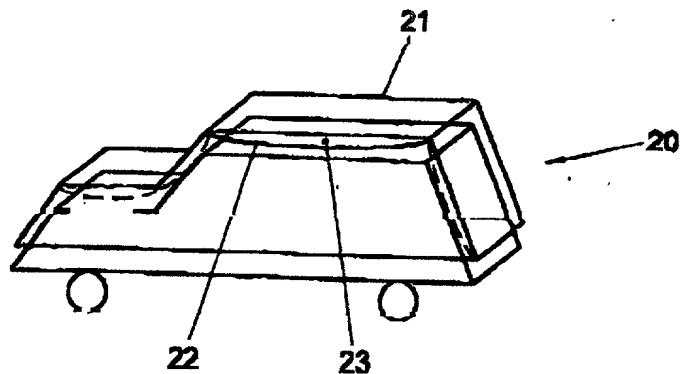


Fig. 2



Fig. 4

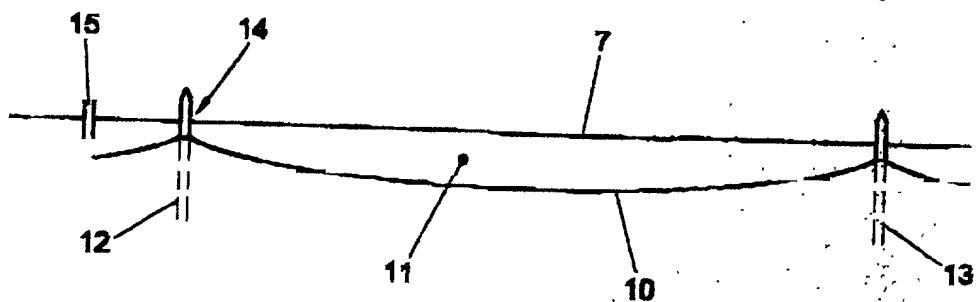
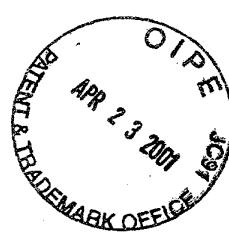


Fig. 3

**Declaration and Power of Attorney Patent Application  
(Design or Utility)**



As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: "Construction and Method for Manufacturing this Tent Construction".

the specification of which

- is attached hereto
- was filed on January 10, 2001 as application serial no. 09/720,268 and or PCT International Application number PCT/NL99/00444 and was amended on \_\_\_\_\_ (If applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. §1.56.

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or 35 U.S.C. §365(b) of any foreign application(s) for patent or inventor's certificate, or 35 U.S.C. §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate of PCT International application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application(s) |         |                      |
|------------------------------|---------|----------------------|
| Number                       | Country | Day/Month/Year Filed |
| 1009617                      | NL      | 10 July 1998         |
| Number                       | Country | Day/Month/Year Filed |
| Number                       | Country | Day/Month/Year Filed |

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below:

| <b>Prior Provisional Application(s)</b> |                            |
|---|----------------------------|
| Serial Number                           | Day/Month/Year Filing Date |
| Serial Number                           | Day/Month/Year Filing Date |
| Serial Number                           | Day/Month/Year Filing Date |

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s), or under 35 U.S.C. §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

| <b>Prior U.S. or International Application(s)</b> |                      |                                       |
|---|----------------------|---------------------------------------|
| Serial Number                                     | Day/Month/Year Filed | Status (patented, pending, abandoned) |
| Serial Number                                     | Day/Month/Year Filed | Status (patented, pending, abandoned) |
| Serial Number                                     | Day/Month/Year Filed | Status (patented, pending, abandoned) |

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## Power of Attorney

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

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| Nathaniel A. Humphries  | <u>22,772</u>       |

I hereby authorize them or others whom they may appoint to act and rely on instructions from and communicate directly with the person/organization who/which first sends this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instructed otherwise.

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